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MONOGRAPH

THE COMMONWEALTH OF MASSACHUSETTS

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(Revised 1977)

I GENERAL INFORMATION

1. Official Name: Commonwealth of Massachusetts

a. State Capital: Boston

2. Location: Northeastern sector of the continental United States bordered by the states of Vermont and New Hampshire on the north, the Atlantic Ocean on the east, the states of Rhode Island and Connecticut on the south and the state of New York on the west. The State House cupola in Boston is at latitude 42° 21′ 29.036″, longitude 71° 03′ 51.075″.

3. Population,

1950:	4,690,514
1955:	4,837,645*
1960:	5,149,834
1965:	5,295,281*
1970:	5,689,170
1975:	5,789,478*

*In general, military personnel and students boarding at educational institutions were not included.

a. Population Rank: 10th of the 50 states

b. Cities over 100,000 (1975) Boston (637,986), Worcester (172,342), Springfield (168,785), Cambridge (102,095), New Bedford (100,345), Fall River (100,339).

4. Area in Sq. Miles: Land—7,838.68, Water—254.34, Total—8,093.02

a. Area, Rank: 45th of the 50 states

5. Density, (Persons per square mile)

	Land Area	Total Area
1950:	598	580
1955:	617	598
1960:	657	636
1965:	676	654
1970:	726	703
1975:	739	715

a. Density, Rank: 3rd of the 50 states—Land Area and Total Area

6. Income (Personal)

a. Total $35,568,000,000 (1975) 10th in U.S.

b. Per Capita $6,114 (1975) 15th in U.S.

7. Climate:

	Boston	Pittsfield	Worcester
Normal Temp. in Jan.—	29.9°F	21.8°F	25.9°F
Normal Temp. in July—	73.7°F	67.8°F	70.6°F
Normal Annual Precip.—	42.8 inch.	44.4 inch.	45.4°F

8. Elevation: From sea level in the east to 3,491 feet (Mt. Greylock in the town of Adams) northwestern Massachusetts

9. Topographical Characteristics: The state is divided into 7 physiological regions. From east to west: 1) *Cape Cod*—flat, nearly at sea level with many lake or pond filled depressions; 2)*Boston Basin*—gentle contour with tear-drop shaped hills (drumlins) below 250 feet; 3) *Seaboard Lowland*—flat to gently rolling with 1,000 to 2,000 foot elevations; 4) *New England Upland*—rolling to hilly plateau with 1,000 to 2,000 foot elevations, largest of the regions which straddles the; 5) *Lower Connecticut Valley*—flat to gently rolling with less than 100 to 400 foot elevations; 6) *Berkshire Hills*—rough rolling upland of a general elevation of 2,000 feet; and 7) *Green Mountains and Foot Hills*—rugged and mountainous with 1,500 to 3,000 foot elevations.

I GENERAL INFORMATION (Cont'd)

10. Topographical Characteristics: (cont'd)

The land surface has 24 drainage basins—along the east coast: Parker, Ipswich, Mystic, Charles, Neponset, Weymouth, Taunton and Ten Mile; east and central Massachusetts: the Merrimack (with its tributaries Assabet, Concord, Nashua Shawsheen and Sudbury) and Blackstone; central and western Massachusetts: the Connecticut (with its tributaries Chicopee, Deerfield, Farmington, Miller and Westfield) and French and Quinebaug; and for western Massachusetts: Hoosic and Housatonic. The state has 1,980 miles of tidal shoreline, 190 miles east to west and 110 miles north to south, at its widest parts.

11. Aerial Survey Photos:

Information on the availability of aerial survey photos for sections of the state may be obtained from the Geodetic Survey Div., Mass. Dept. of Public Works, 100 Nashua St., Boston, MA 02114.

12. U.S.G.S. Topographic Maps:

The entire state covered in various combinations. Maps may be obtained from Distribution Section, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202 or local agents.

13. Significant Dates:

November 2, 1620—Pilgrims land at Provincetown.
December 21, 1620—first permanent English settlement in America at Plymouth
February 6, 1788—6th state to ratify U.S. Constitution.
March 15, 1820—last major change in state's territory, District of Maine became a state.

14. Government:

Six constitutional officers elected for 4 years: Governor, Lieutenant-Governor, Attorney-General, Secretary, Treasurer and Receiver-General and Auditor. Eight Executive Councillors elected for 2 years from 8 districts to give advice to and confirm certain appointments of the Governor. General Court (Legislature) elected for 2 years composed of 40 Senators and 240* members of the House of Representatives.

15. Governmental Subdivisions:

The Commonwealth is divided into 14 counties with very little governmental significance and no legislative powers. There are 351 municipal entities, each with its own form of government and a large amount of home rule—39 are cities and 312 are towns.

16. Special Districts:

One of the six New England States
12 Congressional Districts

*(160 beginning in 1979)

II POPULATION – U. S. CENSUS – 1970

A. During the decade 1960 to 1970, the population of Massachusetts increased by 539,336, or 10.5%. There was an excess of births over deaths of 460,521. During this same period there was a net in-migration of 78,815.

B-1 NUMBER OF PEOPLE (1)

Year	Number	Percent of 1930 State	N.E.	U.S.
1920	3,852,356	90.7	90.6	86.1
1930	4,249,614	100.0	100.0	100.0
1940	4,316,721	101.6	103.3	107.3
1945	4,493,281	105.7	101.9*	108.3*
1950	4,690,514	110.4	114.1	122.8
1955	4,837,645	113.8	118.6*	134.0*
1960	5,149,834	121.2	128.7	145.6
1965	5,295,281	124.6	136.7*	157.3*
1970	5,689,170	133.9	145.1	164.9
1975	5,789,478	136.2	149.4*	173.0*

B-2. AGE COMPOSITION

Age	Number	% of Total State	N.E.	U.S.
Under 5	470,066	8.3	8.4	8.4
5-14	1,097,757	19.3	19.5	20.0
15-19	514,556	9.0	9.0	9.4
20-64	2,970,606	52.2	52.3	52.2
65 & over	636,185	11.2	10.7	9.9
Under 18	1,875,764	33.0	33.4	34.3
21 & over	3,507,990	61.7	61.4	60.4
Median Age		29.0	28.9	28.1

B-3. ETHNIC – RACIAL DATA

	Number	Percent of Total State	N.E.	U.S.
White	5,477,624	96.3	96.2	87.7
Negro	175,817	3.1	3.3	11.1
Other	35,729	0.6	0.5	1.2
Foreign Stock	1,891,724	33.3	30.5	16.5
Foreign Bom	494,660	8.7	7.8	4.7
Persons of Spanish Language	64,860	1.1	1.3	4.6

Of the 1,891,724 persons of foreign stock, 24.7% were from Canada, 15.6% Italy, 11.6% Eire, 8.1% United Kingdom and 6.2% Poland.

B-4. EDUCATION (Persons 25 yrs. old & over)

	State	N.E.	U.S.
Median No. of School years completed	12.2	12.2	12.1
Completing less than 5 grades	4.1%	3.9%	5.5%
Completing High School only	34.9%	33.5%	31.1%
Completing College or more	12.6%	12.1%	10.7%

B-5. OCCUPATION

Of the 4,009,009 persons 16 years old and over in the State, 2,389,419, or 59.6% were in the civilian labor force. Of these, 59.6% were males and 40.4% were females.

Group	Number	% of Total State	N.E.	U.S.
Prof., Tech. & Kindred	400,136	17.4	16.6	14.8
Mgrs., Off., & Prop.	197,638	8.6	9.0	10.2
Clerical, Etc.	457,863	19.9	18.6	18.0
Sales	161,434	7.0	6.8	7.1
Craftsmen, Foremen, etc.	301,341	13.1	14.0	13.8
Operatives	404,430	17.6	18.8	17.5
Pvt. Hshld workers	15,378	0.7	0.9	1.5
Service wkrs.	272,915	11.9	11.2	11.3
Laborers	87,034	3.8	4.2	5.7

B-6. POLITICS, PARTY AFFILIATION, 1976

Total Registered Voters	2,872,483
Registered Democrats	45.5%
Registered Republicans	16.0%
Registered American	0.0%
Unenrolled Voters	38.5%

B-7. INCOMES

	Families	% of Families State	N.E.	U.S.
Incomes under $3,000	89,536	6.4	6.8	10.3
From $3,000-$5,999	163,548	11.8	12.4	15.7
From $6,000-$9,999	357,945	25.7	26.4	26.7
$10,000-$14,999	429,653	30.9	30.2	26.6
$15,000 & over	350,300	25.2	24.3	20.7
Median Income of Families		$10,835	$10,617	$9,590
Per Capita Income		$ 3,425	–	$3,139

*Estimates from P-25 Reports, U.S. Dept. Commerce

(1) Population projections by age groups and sex for years 1980-2000 by 5 year intervals have been produced by the Office of State Planning for the State and its 13 planning areas. The 13 regional planning commissions are presently preparing the same for their municipalities.

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III HOUSING – U.S. CENSUS, 1970

A. The Census reported that the state had 1,890,319 housing units. Of the 1,836,198 year-round units 1,012,173 were owner occupied, 747, 519 were renter occupied and 76,506 vacant.

B-1. TYPE OF STRUCTURE

		% of Total		
	No. of Units	State	N.E.	U.S.
1 Unit	926,323	50.4	55.7	69.1
2 Units	311,897	16.9	15.3	8.0
3 & 4 Units	279,209	15.2	13.0	5.3
5 or more Units	310,671	16.9	14.4	14.5
Mobile Home or Trailer	10,928	0.6	1.6	3.1

B-2. NEW CONSTRUCTION*

Year	Family Accommodations
1960-1964	142,936
1965-1970	200,625
1971	57,919
1972	52,212
1973	43,207
1974	27,765
1975	21,939

B-3. AGE

		% of Units		
Year Built	No. of Units	State	N.E.	U.S.
1965-Mar. 1970	162,854	8.8	10.3	13.1
1960-1964	137,688	7.5	8.3	11.9
1950-1959	271,580	14.8	15.9	21.4
1940-1949	145,690	7.9	8.9	13.0
1939 or earlier	1,121,216	61.0	56.6	40.6

B-4. PERSONS PER UNIT

		% of Persons		
Persons	Units	State	N.E.	U.S.
1 Person	331,521	18.8	17.7	17.5
2 Persons	497,699	28.3	28.6	29.5
3 Persons	296,231	16.8	17.1	17.2
4 Persons	263,229	15.0	15.5	15.5
5 Persons	177,164	10.1	10.3	9.8
6 Persons or more	193,848	11.0	10.8	10.4
Median Persons per unit		2.7	2.7	2.7

B-5. VALUE OF ONE-DWELLING-UNIT STRUCTURES

		% of Units		
	No. of Units	State	N.E.	U.S.
Under $10,000	43,648	5.6	8.5	21.6
$10,000-$19,000	320,414	39.9	38.9	40.3
$20,000-$24,000	173,020	22.1	20.1	14.7
$25,000-or more	245,339	31.4	32.5	23.4
Median Value		$20,800	$20,700	$17,000

B-6. GROSS RENTS

		% of Units		
	Units			
Under $60	46,994	6.6	7.5	11.4
$60-$79	85,501	12.0	12.7	14.5
$80-$99	117,054	16.4	17.4	17.6
$100-$149	283,368	39.7	38.6	33.8
$150 & Over	181,028	25.3	23.8	22.6
Median Rent		$117	$114	$108

*From building permits issued

IV ECONOMIC BASE

A. HISTORIC TRENDS

From the beginnings in the first permanent English settlement at Plymouth, industry developed and expanded rapidly. At first it was small-scale farming to raise the basic necessities to sustain life, then Yankee ingenuity showed itself in the variety of products the farmers produced in their homes to supply their own and their neighbors' needs.

Necessity being the spark to kindle invention—shipyards sprang up to build ships to transport produce and travelers first to coastal and then international markets. Water transportation being necessary locally because roads had not been built, in that, the wherewithal to build them was not available and, even if built, the Indians were still resisting the encroachment of the settlers. Shipyards brought other industries into existence—ropewalks, canvas makers, sail-makers, fabricators of metals, lumbering, etc.

The lifting of England's oppressive hand did not bring into being a land of 'milk and honey,' but rather a series of inter-regional squabbles resulting in a period of economic depression. The adoption of the federal constitution and Washington's guidance brought stability to the economy. Massachusetts expanded her maritime interests by trade with the orient and took over much of the world trade formerly handled by England and France.

Printing and publishing, one of the State's largest industries, got its start in Cambridge (1640) with the printing of The Bay Psalm Book. Benjamin Franklin and his father had the first commercial soap works in America.

The Embargo Act, calculated to punish England and France for their interference with our ships, caused much economic suffering, but that was worsened by Mr. Madison's War of 1812. The inability to import goods forced the new country to enter the manufacturing field and Massachusetts, because of climate, topography and skilled labor, became a leader in textiles, leather products, apparel and machinery.

Francis Cabot Lowell set up and perfected his steam power loom in Waltham in 1814 which aided Fall River, Lawrence, Lowell and New Bedford to become great cotton textile manufacturing centers. Other beginnings leading to industrialization during this period were: first American railroad in Quincy (1826), William Beecher made the first eye-glasses in America (1833) in Southbridge, Charles Goodyear first vulcanized rubber (1839) in Woburn, Ebenezer Buttrick invented standardized clothes patterns (1863) in Sterling.

War between the states (1861–1865) established the Commonwealth as a leader in the country's industrial economy, a position which continued with the added desirable asset of industrial diversification, due in large measure to the adaptability of its labor force. Developments in this era included: demonstration of the first telephone by Alexander Graham Bell (1876) in Boston, William Stanley demonstrated the first transformer (1886) in Great Barrington and Charles and Frank Duryea perfected the first successful gasoline powered automobile (1892) in Springfield.

Massachusetts factories produced more than one-third of the country's woolen goods. Leather and leather products became a very important segment of the State's economy and by 1900 the factories of Boston, Brockton, Haverhill, Lynn, Marlborough, Worcester and other Massachusetts municipalities were turning out about half of the United States' footwear (leather) production.

The following developments were significant in projecting the nation, if not the world, into the computer-space age: (1926) the first liquid-propelled rocket fired by Prof. Robert H. Goddard in Auburn, (1928) the first computer, non-electrical differential analyzer developed by Dr. Vannevar Bush of M.I.T. in Cambridge and (1944) first automatic digital computer, developed by Howard Aiken of Harvard University in Cambridge.

Industry expanded to meet the demands of World War I and continued to expand until the economic crisis of 1929. Loss of some industries to locations nearer sources of raw materials and cheaper labor held back economic recovery until the advent of World War II when this State's three major assets—skilled labor, research facilities and nearness to major markets—again raised the economy to its greatest heights. The Korean and Vietnamese conflicts continued the Commonwealth's industrial success, broadening its scope into the fields of atomic power, aero-space, oceanography and electronics.

IV ECONOMIC BASE (Cont'd)

B. PRESENT ECONOMY

1. General

The economy of the Commonwealth is dependent upon the economic well being of the Massachusetts portions of 10 standard metropolitan statistical areas which had 85% of the 1975 state population and 88% of the 1975 employment covered by employment security. The 10 SMSA's, which are also the leading centers of labor, manufacturing, population and trade, consist of: Boston, Brockton, Fall River, Fitchburg-Leominster, Lawrence-Haverhill, Lowell, New Bedford, Pittsfield, Springfield-Chicopee-Holyoke and Worcester. All the SMSA's, except the Pittsfield SMSA are part of a megapolis composed of 47 SMSA's from the Manchester, NH SMSA to the Washington, DC-MD-VA SMSA (see Appendices A and C).

In 1975, 110,633 firms reported to the Massachusetts Division of Employment Security that they had an annual payroll of $17,930,202,972 and an average of 1,873,353 persons employed. The following table gives comparable statistics for the Massachusetts portions of the 10 SMSA's:

SMSA's	No. of Firms	1975 Annual Payroll	Avg. 1975 Employees
Boston	55,839	10,746,801,287	1,049,675
Brockton	2,519	324,394,374	38,554
Fall River	2,545	301,808,027	41,349
Fitchburg-Leominster	1,808	301,457,983	32,729
Lawrence-Haverhill	3,983	670,171,712	73,609
Lowell	2,950	422,843,996	47,601
New Bedford	3,171	383,412,957	48,723
Pittsfield	1,799	349,148,999	34,763
Springfield-Chicopee-Holyoke	9,304	1,401,418,316	161,459
Worcester	6,842	1,065,033,920	115,292
Total for SMSA's	90,760	15,966,491,571	1,643,754

The Gross State Product as reported by the Federal Reserve Bank of Boston is as follows:

(In Millions of Dollars)

1970	$29,116	1973	$35,522
1971	30,773	1974	37,344
1972	32,971	1975	39,820

IV ECONOMIC BASE (Cont'd)

B. PRESENT ECONOMY (Cont'd)

2. Manufacturing

In 1975, 10,071 manufacturing firms reported to the Massachusetts Division of Employment Security that they had an annual payroll of $6,408,406,574 and an average employment of 577,605 persons. The 7 largest manufacturing groups, in order of importance as employers, were: electric and electronic equipment, machinery (except electrical), fabricated metal products, instruments and related products, apparel and finished goods, printing and publishing, and transportation equipment.

The 3 largest manufacturing groups, in order of importance as employers, in the 10 industrial centers (SMSA's) of the Commonwealth were:

Boston—	electrical machinery, instruments and related products, and machinery (ex. electrical)
Brockton—	leather and leather products, instruments and related products, and apparel and finished goods
Fall River—	apparel and finished goods, textile mill products, and food and kindred products
Fitchburg-Leominster—	machinery (except electrical), plastic products, and plastics and resins
Lawrence-Haverhill—	electric and electronic equipment, instruments and related products, and leather and leather products
Lowell—	machinery (except electrical), electric and electronic equipment, and textile mill products
New Bedford—	apparel and finished goods, textile mill products, and rubber products
Pittsfield—	electric and electronic equipment, paper and allied products, and machinery (except electrical)
Springfield-Chicopee-Holyoke—	fabricated metal products, machinery (except electrical), and paper and allied products
Worcester—	machinery (except electrical), fabricated metal products, and stone, clay and glass products

The Value of Products (FOB Plant) as reported by the Division of Statistics, Massachusetts Department of Labor and Industries is as follows:

1970	$15,871,655,113	1972	$17,421,151,693
1971	16,063,127,098	1973	19,792,702,334

IV ECONOMIC BASE (Cont'd)

B. PRESENT ECONOMY (Cont'd)

3. Trade

In 1975, 9,485 wholesale firms reported to the Massachusetts Division of Employment Security that they had an annual payroll of $1,452,378,818 and an average employment of 116,987 persons; while 31,494 retail firms had an annual payroll of $2,368,833,925 and an average of 395,874 persons employed.

The 1972 U.S. Census of Business reported the following retail trade data (based on the 1972 Standard Industrial Classification) for the State:

	STATE
Establishments	49,864
Sales	$13,298,580,000
Per Capita Sales	$2,338
Paid Employees in workweek including March 12	367,615

Classification of Business	Estab.	Sales (Add 000)	% of Total
Building Matl., Hardware, Farm Equipment Dealers	1,912	585,932	4.4
General Merchandise Group	1,754	1,850,781	13.9
Food Stores	6,202	2,905,219	21.8
Automotive Dealers	2,724	2,112,043	15.9
Gasoline Service Stations	4,698	794,948	6.0
Apparel, Accessories Stores	3,528	803,271	6.0
Furniture, Home Furnishings, Equipment Stores	3,151	685,295	5.2
Eating & Drinking Places	9,683	1,226,601	9.2
Drug Stores, Proprietary Stores	1,814	384,069	2.9
Misc. Retail Stores	11,183	1,596,229	12.0
Nonstore Retailers	3,215	354,192	2.7

4. Classification of Worker

The 1970 U.S. Census of Population, which reported information on the basis of residence rather than place of employment, showed that there were 1,841,355 private wage and salary workers, 341,167 government workers, 127,498 self-employed and 7,258 unpaid family workers living in the Commonwealth.

V EMPLOYMENT AND PAYROLLS – 1975

As Reported to the Division of Employment Security*

A. All Industry

SIC CODE	Industry	No. of Firms	Annual Payroll	EMPLOYMENT		
				Average	Distribution	Rank
01-07	Agriculture & Services	1,305	49,825,191	6,634	0.4%	12
08	Forestry	5	256,219	30	–	15
09	Fisheries	389	29,408,656	2,344	0.1	13
10-14	Mining	86	10,987,326	874	–	14
15-17	Construction	12,938	1,030,624,271	79,891	4.3	5
20-39	Manufacturing	10,071	6,408,406,574	577,605	30.8	1
40-47	Transportation	3,991	570,570,745	53,365	2.8	8
48	Communication	326	509,973,639	37,378	2.0	9
49	Utilities	252	271,269,249	17,791	0.9	11
50-51	Wholesale Trade	9,485	1,452,378,818	116,987	6.2	4
52-59	Retail Trade	31,494	2,368,833,925	395,874	21.1	3
60-62	Finance	1,931	586,796,485	56,215	3.0	6
63-64	Insurance	2,298	621,944,288	56,071	3.0	7
65-67	Real Estate	4,226	167,941,409	19,266	1.0	10
70-89	Services**	31,836	3,850,986,177	455,028	24.3	2
	Total	110,633	17,930,202,972	1,873,353	99.9%	–

B. Manufacturing

SIC CODE	Group	No. of Firms	Annual Payroll	EMPLOYMENT		
				Average	Distribution	Rank
20	Food & Kindred Products	576	301,846,091	28,456	4.9%	8
21	Tobacco Manufactures	5	926,095	86	–	20
22	Textile Mill Products	336	244,832,189	25,607	4.4	11
23	Apparel & Finished Goods	788	277,826,850	41,386	7.2	5
24	Lumber & Wood Products	347	36,324,369	4,154	0.7	18
25	Furniture & Fixtures	337	77,451,101	8,431	1.5	17
26	Paper & Allied Products	331	315,752,954	28,068	4.9	9
27	Printing & Publishing	1,334	436,190,471	40,656	7.0	6
28	Chemicals & Allied Products	368	261,090,369	19,536	3.4	14
29	Petroleum & Coal Products	40	16,021,627	1,124	0.2	19
30	Plastic & Rubber Products	436	262,329,398	26,882	4.6	10
31	Leather & Leather Products	350	181,248,490	22,808	3.9	13
32	Stone, Clay & Glass Products	309	133,324,747	10,849	1.9	16
33	Primary Metal Industries	252	152,619,048	13,321	2.3	15
34	Fabricated Metal Products	1,079	569,732,174	48,881	8.5	3
35	Machinery, except Electrical	1,501	929,781,619	74,319	12.9	2
36	Electric & Electronic Equip.	632	1,041,499,874	85,745	14.8	1
37	Transportation Equip.	147	396,765,019	29,288	5.1	7
38	Instruments & Related Products	399	560,284,080	43,984	7.6	4
39	Misc. Manufacturing Ind.	504	212,560,009	24,025	4.2	12

*The 1975 figures are based on the revised 1972 Standard Industrial Classification Code. These figures are not comparable to tabulations prior to 1975.

**Covered employment in Service was increased as of 1 Jan. 1972 by extending coverage to employees of non profit organizations, state institutions of higher education & state hospitals.

VI GOVERNMENT FINANCE

A-1. GENERAL

Totals of full market value of all taxable property, tax levy and net debt for the 351 municipalities are expressed in Sections A-2, A-3 and A-4. The cost of municipal government (including schools is raised by each municipality principally through the levies on real property.

A-2. ASSESSED VALUATION OF ALL TAXABLE PROPERTY AT FULL MARKET VALUE, Jan. 1*

Year	Amount
1976–	63,103,898,000
1974–	54,728,100,000
1972–	35,051,300,000
1970–	31,016,200,000
1968–	28,199,950,000

*These are totals of the amounts set for each municipality by the State Tax Commission every 2 years.

A-3. TOTAL TAX LEVY OF THE 351 MUNICIPALITIES

Year		Amount
Fiscal Year	1977	(1)
Fiscal Year	1976	2,460,888,661
Fiscal Year	1975	2,322,428,470
Calendar Year	1973	2,169,494,886
Calendar Year	1972	2,051,183,755
Calendar Year	1970	1,631,476,978
Calendar Year	1968	1,227,158,530

A-4. TOTAL NET DEBT OUTSTANDING–351 MUNICIPALITIES

As of Date		Amount
30 June	1976	2,190,431,084
30 June	1975	2,087,194,363
1 January	1973	Not Avail.
1 January	1972	1,653,278,738
1 January	1970	1,255,984,852
1 January	1968	1,044,058,470

(1) Not available at press time.

VI GOVERNMENT FINANCE (Cont'd)

A-5. State

A brief outline of the finances—expenditures and revenues of the Commonwealth for the fiscal year 1976 may be seen in the pie charts below as found in the 1976 Abstract of the Financial Report of the Comptroller:—

CHART A

HOW THE STATE REVENUE WAS OBTAINED
(Including Bond Issues)
FISCAL YEAR ENDED JUNE 30, 1976
$5,459,703,540

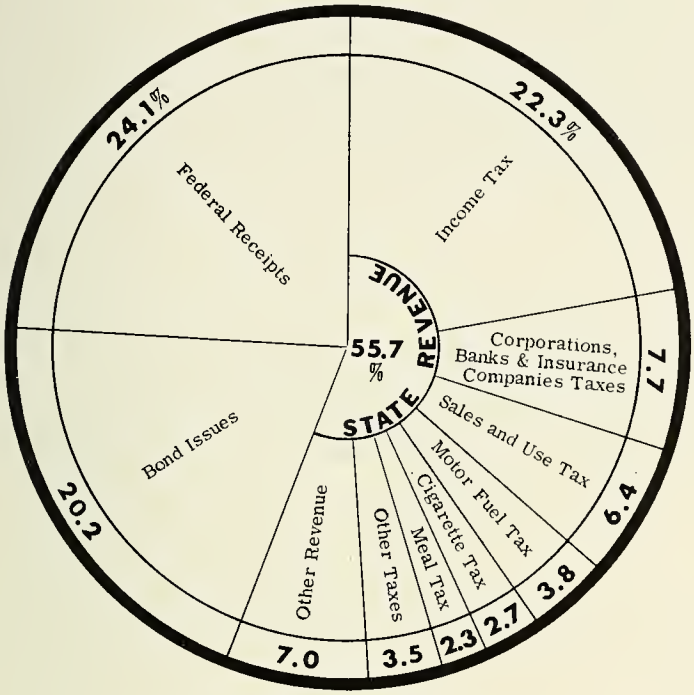


CHART B

HOW THE STATE REVENUE WAS OBTAINED
(Excluding Bond Issues)
FISCAL YEAR ENDED JUNE 30, 1976
$4,349,703,540

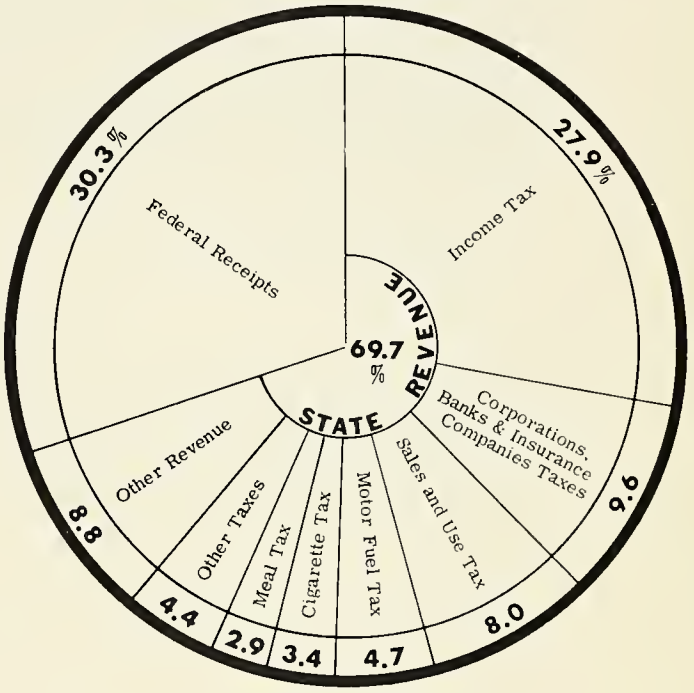


CHART C

DIRECT EXPENDITURES - STATE FUNDS
(Including Debt Retirement)
FISCAL YEAR ENDED JUNE 30, 1976
$4,693,615,522

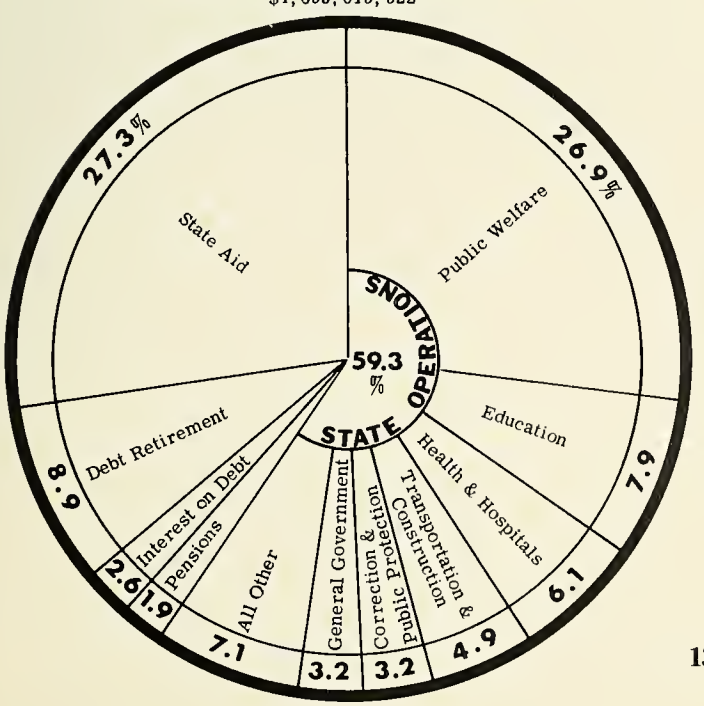
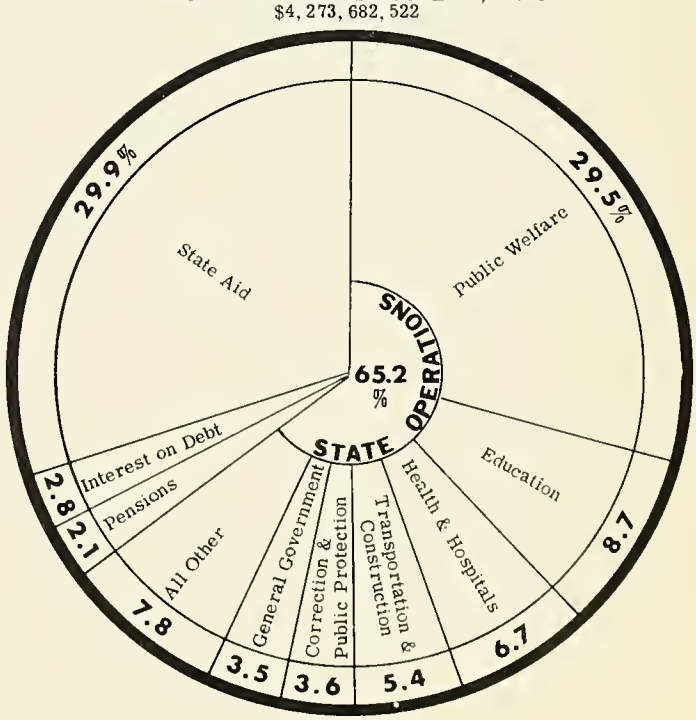


CHART D

DIRECT EXPENDITURES - STATE FUNDS
(Excluding Debt Retirement)
FISCAL YEAR ENDED JUNE 30, 1976
$4,273,682,522



VI GOVERNMENT FINANCE (Cont'd)

A-6. Taxes

BUSINESS OR MANUFACTURING CORPORATIONS

Income Measure	9.5%
Property Measure (reduced from $7.98 per $1,000 since 1972)	$2.60 per $1,000
Minimum Tax	$228.00

Commercial Banks, Banking Associations, Trust Companies—12.54% (net income).

Savings, Cooperative Banks and Savings and Loan Associations—1% and 1/20th of 1% of deposits plus 14% surtax added to base tax.

Life Insurance Companies and Insurance Departments of Savings Banks and Casualty Companies 2.28% of gross premiums, and if domestic—1% on gross investment income.

Fire & Marine Insurance Companies 5.7% (on underwriting profits).

Real Estate Transfer—$1.14 for 1st $100 to $500 of selling price (less mortgage assigned)—$1.14 for each additional $500 or fraction thereof.

PERSONAL INCOME

The State income tax law is based on two classes of income taxable at either 5% or 10% as follows: 10% ("unearned income") interest, (except from Massachusetts savings accounts), dividends, net capital gains including gains from tangible property.

Earned Income 5% plus 7.5 percent surcharge.

Unearned Income 10% plus 7.5 percent surcharge.

Deductions:

Social Security payments, sick pay, employee business expense, child care and alimony.

Exemptions:

1. No tax if single income is not more than $3,000; or if husband and wife joint return income is not more than $5,000.
2. Single person—$2,000.
3. Husband and wife filing jointly—$2,000 plus amount of earned income not exceeding $2,000 of spouse with smaller income, plus $600 if earned income of such spouse is not more than $2,000. Married persons filing separately—$1,000 each.
4. $100 for single person and $200 for husband and wife filing jointly against savings account interest from institutions within the Commonwealth, which is taxed at the 5% rate.
5. $600 for each dependent.
6. $600 additional for taxpayers and spouses age 65 or over.
7. Medical and dental expenses as claimed on U.S. return.

VI GOVERNMENT FINANCE (Cont'd)

A-6. Taxes (Cont'd)

SALES AND USE TAX

5% on gross receipts of sales (including rental) or the storage, use or consumption of tangible personal property.

Exemptions:

Machinery, replacement parts thereof, materials, tools and fuel used directly and exclusively in an industrial plant, in furnishing power to an industrial plant, in agricultural production; and in commercial fishing; food for human consumption; utilities; clothing for human wear up to $175 of sales price of any articles used as wearing material; footwear; newspapers; magazines; schoolbooks; prescription drugs; sales of vessels and barges 50 tons or over constructed in Massachusetts and sold by the shipbuilder; fuel, supplies of fuel and repairs for vessels engaged in foreign and interstate commerce; fuel for heating purposes; motion picture films for commercial exhibition; property ordinarily sold by funeral directors; motor vechicles purchased by and specially equipped for paraplegics; casual and isolated sales under given conditions; etc.

MISCELLANEOUS

Room Occupancy—5.7% of total amount of rent for each occupancy.

Meal Tax—8% based on taxable charge of .07¢ or more.

Alcoholic Beverages and Alcohol Excise—Malt beverages $3.30 per barrel (31 gals.) Cider $.03 per wine gallon. Still wine (including vermouth) $.55 per wine gallon. Sparkling Wines and Champagne $.70 per wine gallon. All alcoholic beverages containing 15% or less alcohol $1.10 per wine gallon; beverages containing between 15% and 50% of alcohol $4.05 per wine gallon; beverages containing more than 50% of alcohol $4.05 per proof gallon.

Cigarettes 21¢ per package of 20.

Gasoline 8.5% per gallon.

Employment Security Contributions—8 schedules with rates ranging from 0.5 to 4.1 (present schedule is 2.9%-4.1% on first $4,200 wages of covered worker, plus 1% Solvency Tax).

Public Utilities—6.5% (net income and allocated net income of interstate companies).

Local Property Taxes—Fair cash value of real and personal property. Rates fixed annually by the local board of assessors and must be approved by the State Tax Commission. Tax administered and collected at local level.

All non-corporate businesses are taxed on personal property.

Motor Vehicle Excise—$66 per $1,000 of valuation.

VI GOVERNMENT FINANCE (Cont'd)

A-6 Taxes (Cont'd)

Motor Vehicle Registration Fees

Private Passenger Cars—$14 biennially
Trucks— gasoline—$5 per 1,000 lbs. min. $20 annually
diesel—$20 per 1,000 lbs. min. $80 annually
Tractors—Part of semi-trailer unit
gasoline—$5 per 1,000 lbs. min. $48 annually
diesel—$20 per 1,000 lbs. min. $160 annually
Not part of semi-trailer unit
gasoline—$5 per 1,000 lbs. min. $24 annually
diesel—$20 per 1,000 lbs. min. $60 annually
Trailers— heavy duty—$6 per 1,000 lbs. min. $60 annually
Buses— gasoline—$1.20 or $1.50 per seat depending on capacity min. $6 annually

Pari Mutual Tax—From 2% to 11¾% of amount wagered per day depending upon type of racing, plus additional 1% of tax plus ½ breakage.

Estate Tax—On the taxable estate, after expenses, claims, a $30,000 exemption and a marital deduction—5% to 16%. Most estates under $60,000 are not taxed.

VII EDUCATION

The first free public school in America, supported by direct taxation, was the Mather School established in 1639 by the town of Dorchester (now a geographical section of Boston). The Boston Public Latin School, founded in 1635, was the first public (in that it was operated by Boston) school in America.

The Board of Higher Education has given the authority to 68 private institutions and 15 public institutions to confer degrees at or above baccalaureate level and 24 private institutions and 17 public institutions to confer associate degrees.

Municipalities have banded together in various combinations to form 51 academic and 26 vocational-technical regional educational districts to make a higher standard of education available than could be provided by the municipalities on their own.

SCHOOL ATTENDING CHILDREN TO GRADE 12 (1974-75)

Attending Public Schools	1,190,452
Attending Private Schools	148,989
	1,390,316

Teachers in Local Public Schools (1974) 62,781
Pupil-Teacher Ratio (1974) 17.4
Teacher Salaries (Sept. 1975) – Highest annuals
Bachelor's degree with no experience . . . . . $10,358 in Boston
Master's degree with no experience . . . . . $11,218 in Cambridge

Comprehensive Current Operating Cost Per Pupil in Net
Average Membership (1973-1974) $1,152

VIII TRANSPORTATION

A. GENERAL

The Commonwealth of Massachusetts has adequate facilities for handling air, land and water transportation. Thirteen established regional planning agencies, encompassing within their regions all but 8 of the 351 municipalities, have, as one of their areas of interest, the planning for adequate transportation facilities.

B. AIR

Logan International Airport in Boston is the heart of air activity in the state. This airport is the 8th busiest in the world, based on number of passengers with tickets starting or terminating at Boston. Logan is the nearest major United States' airport to its downtown business district and to Europe. In addition, the Commonwealth has 53 commercial airports, of which 25 are publicly operated and 28 privately. There are also 4 military airfields.

C. COMMUTING

The Boston and Maine Railroad and Conrail supply commuter service in the Boston area subsidized by the Massachusetts Bay Transportation Authority, a state-created agency charged with the responsibility of supplying commuter service to 79 municipalities in eastern Massachusetts.

The inner sector of the Massachusetts Bay Transportation Authority area, consisting of Boston and 13 other municipalities, is served by fleets of buses, trolley buses, subway and elevated trains and high-speed trolley cars. The rapid transit facilities have been extended to the north and south and plans are being proposed to extend the Cambridge-Quincy Line west to Arlington and the Malden-Forest Hills Line southwest to Needham.

Recognizing the responsibility of government to supply public services when private enterprise finds itself inadequate to the task, the 1973 session of the General Court enacted legislation providing for the creation of 10 transportation authorities to serve 10 population centers of the state, subject to acceptance by the municipalities permitted to form the 10 authorities. Provision is made in the law for the municipalities adjacent to an authority's area to join said area. The 1973 law permitted the following named areas to be served by these authorities: Attleboro-Taunton, Brockton, Cape Cod, Fall River-New Bedford, Fitchburg-Leominster-Gardner, Lawrence-Haverhill, Lowell, Pittsfield, Springfield-Chicopee-Holyoke, and Worcester.

D. HIGHWAY

The major highways serving the Commonwealth may best be described as those routes emanating from Boston and vicinity like the spokes of a wheel, or ribs of a fan, strengthened by 2 arcs or radials supporting the ribs or spokes. Listed counter-clockwise: IR 95 northeasterly to Maine, IR 93 and U.S. 3 to New Hampshire, the cross-state routes—State 2 (to New York State), U.S. 20 (to the Pacific Ocean in Oregon), State 9 (to Pittsfield, Mass.), IR 90 (the Massachusetts Turnpike) to Seattle, Washington, and the southern routes IR 95 (to Florida), State 24 (to IR 195 in Fall River) and State 3 (to Cape Cod). IR 91 passes north to south through the Connecticut River Valley intersecting with IR 90, State 9, U.S. 20 and State 2 and on to connect with Canadian Route 10 to Montreal.

E. RAIL

The State is served by 3 Class I railroads—Boston and Maine, Central Vermont (Canadian National) and Conrail. Other railroads serving Massachusetts are the Fore River, Grafton and Upton and Providence and Worcester.

Piggy-Back service is provided within the State by the Boston and Maine Railroad at Cambridge, Fitchburg and Holyoke and by Conrail at Boston, West Springfield and Worcester.

F. TRUCKING

The Massachusetts Turnpike (IR 90), one of the State's cross-state routes, has 5 tandem trailer lots at Interchanges #1 in West Stockbridge with State Routes 41 and 102, #6 in Chicopee with IR 291, #11 in Millbury with State Route 122, #14 in Weston with State Route 128 and #18 in Boston at the Beacon railyard in the Allston section of the city.

VIII TRANSPORTATION (Cont'd)

G. WATER

The seven major ports in Massachusetts with 1975 statistics from the U.S. Corps of Engineers are:

Ports	Total Port Tonnage	Total Import Tonnage
Beverly	222,470	Not Avail.
Boston	24,719,452	5,987,864
Fall River	4,834,393	1,570,953
Gloucester	188,173	Not Avail.
New Bedford-Fairhaven	361,026	216,137
Plymouth	252,016	Not Avail.
Salem	1,936,086	1,323,569
Remainder of State	390,359	–

Boston, the largest port, has one of the best natural, deep-water harbors in the world, is 200 miles nearer Africa and Europe than New York City, 1,200 miles nearer Panama and the West Coast of South America than San Francisco and nearer Rio de Janeiro and Buenos Aires than any other North Atlantic Port.

Boston is one of the leading container shipping ports in the world with equipment surpassed by none.

H. FOREIGN TRADE ZONES

Decisions by the U.S. Foreign Trade Zone Board are being awaited (as of 3 January 1977) for permission to establish Foreign Trade Zones at the ports of Boston and New Bedford.

SHORTEST ROUTES TO IMPORTANT FOREIGN PORTS AND JUNCTION POINTS

	To FASTNET IRELAND	Boston's Advantage (miles)	To BISHOPS ROCK ENGLAND	Boston's Advantage (miles)	To PENTLAND FIRTH SCOTLAND	Boston's Advantage (miles)
Boston	2,669		2,783		2,947	
New York	2,837	168	2,957	174	3,120	173
Philadelphia	2,985	316	3,092	309	3,263	316
Baltimore	3,123	454	3,230	447	3,401	454
Norfolk	3,002	333	3,107	324	3,280	333

	To BORDEAUX FRANCE	Boston's Advantage (miles)	To STRAITS OF GIBRALTAR	Boston's Advantage (miles)	To AZORES	Boston's Advantage (miles)
Boston	3,094		3,008		2,086	
New York	3,258	164	3,180	172	2,247	161
Philadelphia	3,406	312	3,320	312	2,392	306
Baltimore	3,544	450	3,466	458	2,409	323
Norfolk	3,423	329	3,335	327	2,401	315

	To CAPETOWN SO. AFRICA	Boston's Advantage (miles)		To RIO DE JANEIRO BRAZIL*	Boston's Advantage (miles)
			Boston	4,738	–
Boston	6,707		New York	4,762	24
New York	6,786	79	Philadelphia	4,817	79
Philadelphia	6,861	154	Baltimore	4,844	106
Baltimore	6,912	205	Norfolk	4,723	15
Norfolk	6,790	83	San Francisco	7,581	2,843

(SOURCE: U.S. Navy Hydrographic Office)

*Source: Table of Distances, U.S. Dept. of Commerce

Revised
27 Dec. 76

IX ECONOMIC DEVELOPMENT

BOSTON REDEVELOPMENT AUTHORITY Property Of Library

A. DEVELOPMENT INCENTIVES

1. Financial

The following is a listing of measures available to make the establishment or expansion of a business more profitable in Massachusetts:

- **Investment Credit**
  A 3% tax credit for investment in new or expanded manufacturing and R&D facilities including building, machinery and equipment for taxable years 1972 through 1977. This credit also covers tangible property rented or leased from business development corporations.
- **Employment Opportunity Incentive**
  $500 credit for each additional job created in manufacturing and R&D above a normal growth factor under certain conditions for taxable years 1973-1977.
- **Urban Job Incentive**
  Up to 47% reduction of local property taxes plus an additional 25% payroll deduction of eligible payroll for new and expanded manufacturing, R&D and warehousing facilities located in certain areas within the state for up to ten years of operation.
- **Training Assistance Program**
  All companies creating new jobs in Massachusetts are eligible for a free, all expenses paid employee training program under most conditions.
- **Loss Carry-Over**
  Losses sustained by any new corporation in the first five years of operation may be carried forward for tax purposes.
- **Sales Tax Exemption**
  Machinery and replacement parts, materials, tools, and fuel are exempt from state sales tax.
- **Payroll Factor Incentive**
  Growth Incentive: For tax purposes, allocated payroll remains at 1972 levels plus a five percent growth per year or 75 percent of actual payroll, whichever is greater. This reduces future tax liability for manufacturing and R&D corporations.
  Location Incentive: Corporations with concentrated assets and payrolls in Massachusetts receive an added tax advantage through a change in the factor allocation formula.
- **Pollution Control Assistance**
  Financial assistance and tax relief is available for resolving pollution abatement problems. These measures include local property tax exemption, tax exempt industrial bond financing, and optional liberal depreciation or deduction of expenditures or three percent investment tax credit.
- **Tax Exempt Industrial Revenue Bonds**
  Low cost bond financing available for industrial development projects up to $5 million.
- **Massachusetts Business Development Corporation**
  An extremely valuable service to the business community as a secondary source of capital, complementing Massachusetts' excellent financial service structure.
- **Local Property Tax Exemption**
  Tangible property consisting of inventory, machinery and equipment for manufacturing corporations, and of inventory and equipment for non-manufacturing corporations is exempt from local property taxes.
- **Massachusetts Community Development Finance Corporation (C.D.F.C.)**
  A financial assistance agency designed to provide front-end capital to businesses in order to create and retain jobs and tax revenues in the Commonwealth.
- **Massachusetts Industrial Mortgage Insurance Agency (M.I.M.I.A.)**
  A financial assistance agency of the Commonwealth which is empowered to provide insurance on loans to industries which need financing.

(For more detailed information on the above refer to "Massachusetts Business Incentives")

IX ECONOMIC DEVELOPMENT (Cont'd)

A. DEVELOPMENT INCENTIVES (Cont'd)

2. Labor Stability

During the period 1970-1975 the Commonwealth ranked 2nd in labor stability among the 10 states having the largest number of non-agricultural employees. Stability is based on non-agricultural employment and days idle from labor disputes per 10,000 days available—in this way all states, large and small, are put on a fair comparative basis.

3. Geographical

The Northeast American Market* (500-mile radius of the City of Worcester—see Appendices A, B and C) includes:

- —an estimated population of 74,940,000, of which 60,710,000 were in the United States (28.5% of U.S. total) and 14,230,600 were Canadian (62.0% of Canadian total)
- —an area comprising 11 states, District of Columbia and parts of 4 states in the U.S.; and in Canada 1 province and parts of 3 others
- —65 entire Standard Metropolitan Statistical Areas (centers of industry, population and trade) and partial inclusion of 4 other SMSA's in the U.S. with a total population of 50,422,014, or 23.7% of the U.S.
- —11 of the 22 Canadian Metropolitan Areas with a total population of 8,587,500, or 37.4% of the Canadian total

*1975 estimates—Canadian data from 1976 Survey of Buying Power, Sales Management Magazine.

B. LABOR SUPPLY and WAGE RATES

1. Supply

Labor supply and types of workers available may be obtained from the labor market economists of the Research Department, Massachusetts Division of Employment Security, Charles F. Hurley Building, Government Center, Boston, MA 02114 and from the area offices of the Division of Employment Security.

Statistics to assist firms participating in Affirmative Action Programs are available from aforementioned labor market economists.

2. Wage Rates

a. Hours and Earnings of Production Workers in the State are found in the monthly "Employment Review" by the Massachusetts Division of Employment Security. (see Appendix D).

b. Bureau of Labor Statistics, U.S. Department of Labor publications—

- —"Area Wage Surveys, Metropolitan Areas" (annually)
- —"Industry Wage Surveys" (annually) e.g., machinery workers
- —"Occupational Earnings and Wage Trends in Metropolitan Areas" (annually in 3 part series)
- —"Occupational Earnings in Selected Areas" (annually in 3 part series)

IX ECONOMIC DEVELOPMENT (Cont'd)

C. DEVELOPMENT ASSISTANCE

Development assistance is available from many sources at the federal, state, regional and local levels. Among the most important (from which other sources can be suggested) are: Small Business Administration of the U.S. Dept. of Commerce, local industrial development commissions, and the regional development commissions (see X PLANNING).

The Office of New Business Development of the Massachusetts Department of Commerce and Development provides advice and services on the following:

—Available land and buildings

—Data on the wage rates, labor supply and other statistics on the work force

—Handles the Training Assistance Program (an all expense-paid, customized training of employees)

—Help secure investment capital for growing businesses

—Supply information on numerous tax incentives

—Answer questions relative to transportation facilities, natural resources and environmental regulations

—Encourage foreign investment in Massachusetts and assist Massachusetts companies in exporting their goods

Maps providing graphic presentations of regional and state economic, physical and sociological characteristics may be obtained from the Office of Local Assistance, Department of Community Affairs, 1 Ashburton Place, Boston, MA 02108.

D. BUSINESS ASSISTANCE PROGRAMS

State Office of Minority Business Assistance (SOMBA)— established to make other state agencies more sensitive to the needs of minority entrepreneurs, increase state purchases of goods and services from minority businesses, and develop programs upgrading the management skills of minority businessmen and businesswomen in Massachusetts.

Business Contact Program— visitation program by department personnel to manufacturers with 20 or more employees and non-manufacturers with more than 50— to increase the awareness among businesses of the State's concern for their economic well-being, make known the State's broad spectrum of business aids and improve relationships between industry and State agencies.

Governor's *Development Cabinet*— to bring about conditions necessary to encourage investment, expansion of business and therefore the creation of new jobs.

X PLANNING

The Commonwealth has been divided into 13 regional planning districts encompassing 343 municipalities. The districts form such distinct economically and socially integrated areas that they are quite suitable for logical planning regions and could quite reasonably form the basis for dividing the state into other types of economic, political or social districts—such as counties (if, indeed, we need counties), regional govemments, sales territories, etc. The regional planning districts were set up to plan for the economic and social growth of their respective regions and to aid their member municipalities in their local planning efforts.

329 municipalities, containing about 99% of the State's population, have planning boards.

212 municipalities have prepared master plans with the use of federal funds—other municipalities have accomplished master plans with local funds.

304 municipalities containing about 98% of the State's population, regulate zoning.

Regional Planning Commissions in Massachusetts

Berkshire Regional Planning Commission, 10 Fenn St., Pittsfield 01201.
Cape Cod Planning & Economic Development Commission, First District Court House, Barnstable 02630.
Central Massachusetts Regional Planning Commission, 70 Elm St., Worcester 01609.
Dukes County Planning & Economic Development Commission, Box 1447, Oak Bluffs, 02557.
Franklin County Department of Planning, Court House, Greenfield 01301.
Lower Pioneer Valley Regional Planning Commission, 26 Central Street, West Springfield 01089.
Merrimack Valley Planning Commission, 87 Winter St., Haverhill 01830.
Metropolitan Area Planning Council, 44 School St., Boston 02108.
Montachusett Regional Planning Commission, 150 Main St., Fitchburg 01420.
Nantucket Planning & Economic Development Commission, Broad St., Nantucket 02554.
Northern Middlesex Area Commission, 144 Merrimack St., Lowell 01852.
Old Colony Planning Council, 232 Main St., Brockton 02401.
Southeastern Regional Planning & Economic Development District, 7 Barnabas Road, Marion 02738.

XI UTILITIES

A. ELECTRIC SERVICE

Electric power is available to all municipalities in Massachusetts.

To insure better service, New England was one of the first areas of the country to have interchange of power between companies. Presently, the generating units of northeastern United States and Canada have united in the North-eastern Power Coordinating Council, a mutual assistance agency to exchange electric power to prevent "brown-outs" and "black-outs." This system is computer controlled to assure reliability of power sources.

To increase efficiency and capacity, as well as to offset increased inflationary costs of power, the Commonwealth now has two nuclear generating plants (at Plymouth in the east and Rowe in the west) and 2 massive pumped hydro plants.

B. GAS SERVICE

Natural gas is available in all the major industrial and population centers. The various private companies or municipal departments supplying gas to individual customers are serviced by either Algonquin Gas Transmission System or the Tennessee Gas Transmission System.

C. WATER SERVICE

The following are averages of chemical analyses of samples taken from different surface sources in the Commonwealth by the Division of Environmental Health, Massachusetts Department of Public Health in 1975:

MILLIGRAMS PER LITER

	Boston Tap in City Hall[1]	Worcester Tap in City Hall	Springfield Tap in City Hall	New Bedford Tap in City Hall	Lowell Tap in City Hall	Pittsfield Tap in City Hall
Turbidity	1	1	0	2	1	1
Color	12	12	3	25	4	18
pH	6.7	6.9	6.8	7.0	7.1	6.7
Alkalinity	9	7	7	16	12	11
Hardness	15	9	12	13	12	21
Calcium	4.7	2.5	2.8	3.4	3.7	5.8
Magnesium	0.9	0.6	1.0	1.0	0.7	1.6
Sodium	6.7	1.0	5.7	18	18	2.0
Potassium	0.8	0.4	0.5	0.8	1.0	0.7
Iron	0.06	0.00	0.08	0.25	0.03	0.17
Manganese	0.02	0.00	0.01	0.04	0.04	0.05
Silica	2.6	4.4	3.5	2.2	3.7	3.4
Sulfate	8	4	6	10	19	10
Chloride	14	2.3	10	18	16	5.3
Ammonia-N	0.12	0.00	0.00	0.00	0.02	0.00
Nitrate-N	0.2	0.1	0.1	0.0	0.3	0.1
Copper	0.4	0.00	0.6	0.07	0.00	0.21
Spec. Cond.	73	28	84	0.05	125	63

[1] Source of Supply is Water District, Metropolitan District Commission – Supplying 32 municipalities (in whole or in part) in the Boston area and 9 municipalities outside the M.D.C. area.

Revised
20 Dec. 76

METROPOLITAN AREAS
AND
STANDARD METROPOLITAN STATISTICAL AREAS
WITHIN THE NORTHEAST AMERICAN MARKET

Total Inclusion
Canadian Metropolitan Areas

Chicoutimi-Jonquiere (Que.)
Halifax (Nova Scotia)
Hamilton (Ont.)
Kitchner (Ont.)
London (Ont.)
Montreal (Que.)
Ottawa-Hull (Ont.-Que.)
Quebec (Que.)
St. Catherines-Niagara (Ont.)
St. John (New Brunswick)
Toronto (Ont.)

U.S. Standard Metropolitan Statistical Areas

Albany-Schenectady-Troy, NY
*Allentown-Bethlehem-Easton, PA-NJ
Altoona, PA
*Atlantic City, NJ
*Baltimore, MD
*Binghamton, NY-PA
*Boston, MA
*Bridgeport, CT
*Bristol, CT
*Brockton, MA
Buffalo, NY
*Danbury, CT
*Elmira, NY
Erie, PA
*Fall River, MA
*Fitchburg-Leominster, MA
*Harrisburg, PA
*Hartford, CT
*Jersey City, NJ
Johnstown, PA
*Lancaster, PA
*Lawrence-Haverhill, MA-NH
Lewiston-Aubum, ME
*Long Branch-Asbury Park, NJ
*Lowell, MA
*Manchester, NH
*Meriden, CT
*Nashua, NH
*Nassau-Suffolk, NY
*New Bedford, MA
*New Britain, CT
*New Brunswick-Perth Amboy-Sayreville, NJ
*New Haven-West Haven, CT
*New London-Norwich, CT
*New York, NY-NJ
*Newark, NJ
Newport News-Hampton, VA
Norfolk-Virginia Beach-Portsmouth, VA-NC
*Northeast Pennsylvania
*Norwalk, CT
*Patterson-Clifton-Passaic, NJ
Petersburg-Colonial Heights-Hopewell, VA
*Philadelphia, PA
Pittsburgh, PA
*Pittsfield, MA
Portland, ME
*Poughkeepsie, NY
*Providence-Warwick-Pawtucket, RI-MA
*Reading, PA
Richmond, VA
Rochester, NY
*Springfield-Chicopee-Holyoke, MA-CT
*Stamford, CT
Steubenville-Weirton, OH-WV
Syracuse, NY
*Trenton, NJ
Utica-Rome, NY
*Vineland-Millville-Bridgeton, NJ
*Washington, DC-MD-VA
*Waterbury, CT
Williamsport, PA
*Wilmington, DE-NJ-MD
*Worcester, MA
*York, PA
Youngstown-Warren, OH

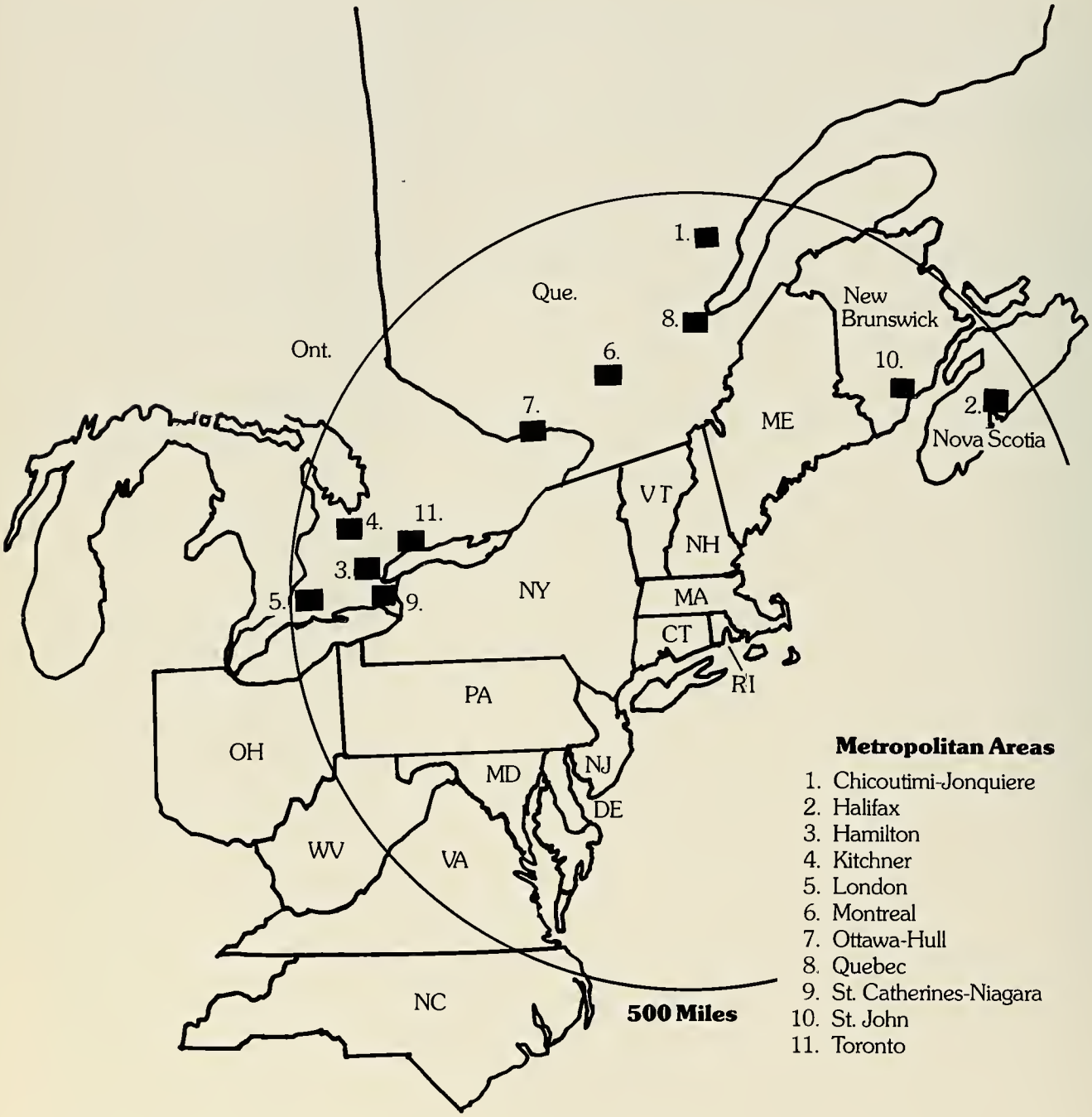
*Part of Eastern U.S. Megapolis

Partial Inclusion of 4 SMSA's

Akron, OH
Canton, OH
Cleveland, OH
Wheeling, WV-OH

NORTHEAST AMERICAN MARKET

CANADIAN METROPOLITAN AREAS

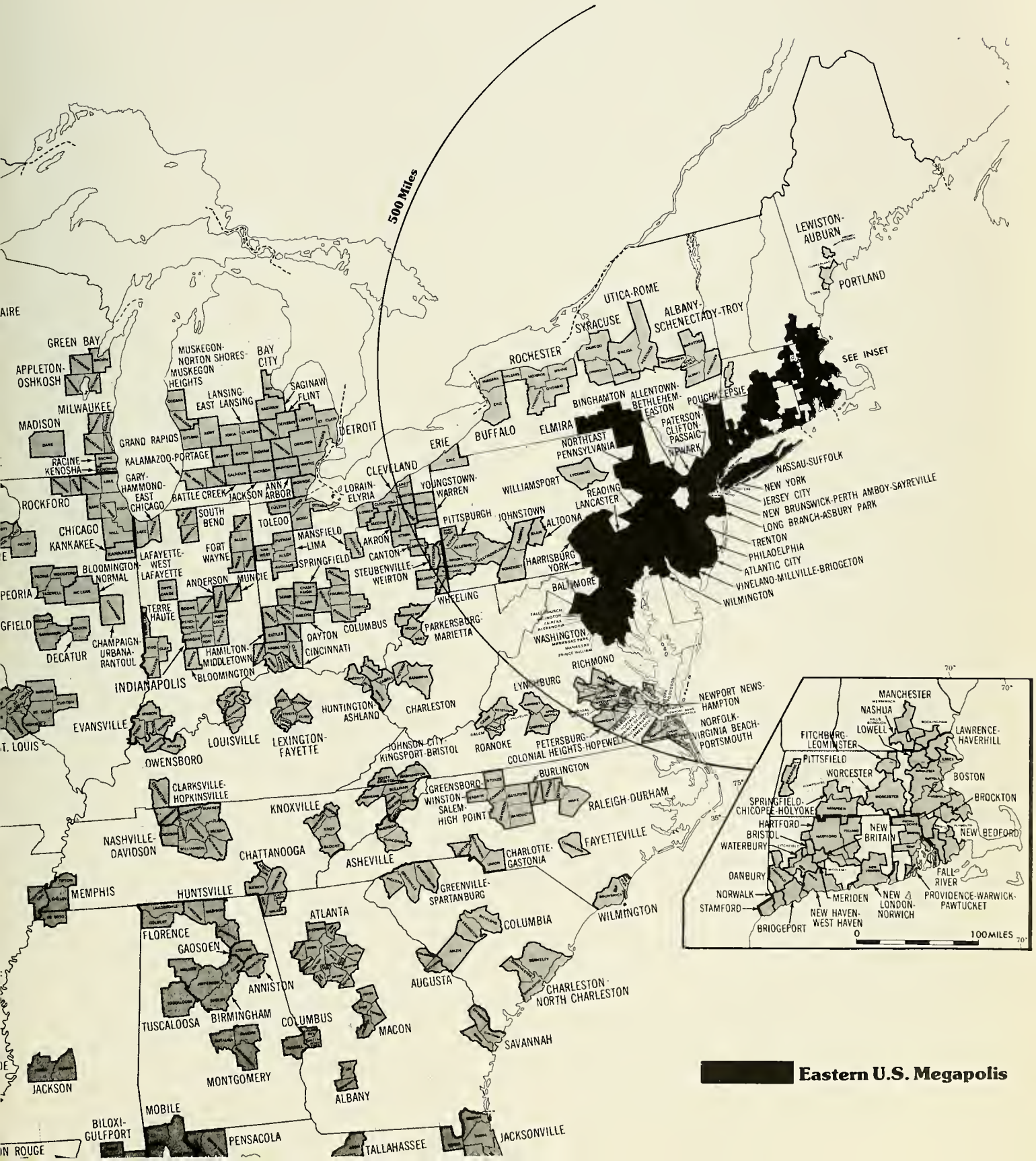


Metropolitan Areas

1. Chicoutimi-Jonquiere
2. Halifax
3. Hamilton
4. Kitchner
5. London
6. Montreal
7. Ottawa-Hull
8. Quebec
9. St. Catherines-Niagara
10. St. John
11. Toronto

NORTHEAST AMERICAN MARKET

STANDARD METROPOLITAN STATISTICAL AREAS



Eastern U.S. Megapolis

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NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT HOURS AND EARNINGS OF PRODUCTION WORKERS MASSACHUSETTS

OCTOBER 1976 — Revised to first quarter 1975 benchmark

ITEMS	NUMBER OF EMPLOYEES (In Thousands)			PRODUCTION WORKER AVERAGES					
				Weekly Earnings		Weekly Hours		Hourly Earnings	
	Oct 76	Sept 76	Oct 75	Oct 76	Oct 75	Oct 76	Oct 75	Oct 76	Oct 75
Nonagricultural Employment—Total	2313.3	2311.9	2293.3						
Manufacturing—Total	592.0	591.7	579.8	$193.26	$179.14	39.2	39.2	$4.93	$4.57
Durable Goods—Total	326.0	323.7	315.8	$210.53	$194.04	40.1	39.6	$5.25	$4.90
Ordnance & accessories	18.6	18.7	20.3	212.27	194.53	39.9	39.7	5.32	4.90
Lumber & wood products	3.9	3.9	3.7	147.04	145.54	37.8	38.2	3.89	3.81
Furniture & fixtures	8.5	8.4	8.4	157.73	152.76	37.2	38.0	4.24	4.02
Stone, clay & glass	12.0	12.0	11.4	233.78	203.61	40.1	38.2	5.83[2]/	5.33
Primary metal industries	18.6	18.6	17.6	228.18	212.01	42.1	41.9	5.42[2]/	5.06
Fabricated metal products—Total	41.3	41.3	40.0	209.90	196.73	41.4	40.9	5.07	4.81
Cutlery, hand tools, hardware	13.3[1]/	13.2	12.7						
Other fabricated metals	28.0[1]/	28.1	27.3						
Machinery (exc. electrical)—Total	77.1	76.9	73.0	$221.49	$199.92	41.4	39.2	$5.35	$5.10
Metalworking machinery	14.1	14.0	13.9						
Special industry machinery	14.5	14.5	14.5						
Other machinery (exc. electrical)	48.5	48.4	44.6						
Electrical equip. & supplies—Total	84.2	83.7	83.7	$188.37	$178.88	38.6	39.4	$4.88	$4.54
Communications equipment	20.8	20.7	22.5						
Electronic components	28.6[1]/	28.2	27.4						
Other electrical equip. & supplies	34.8	34.8	33.8						
Transportation equipment	20.6	19.3	18.3	$216.66	$219.63	34.5[3]/	38.6	$6.28	$5.69
Instruments	41.2	40.9	39.4	236.59	204.85	42.4	39.7	5.58	5.16
Nondurable Goods—Total	266.0	268.0	264.0	$175.03	$163.31	38.3	38.7	$4.57	$4.22
Food & kindred products	30.0	29.8	29.7	196.02	179.79	39.6	39.0	4.95	4.61
Textile mill products—Total	27.1	27.8	26.9	160.39	160.13	39.8	41.7	4.03	3.84
Cotton, manmade fibre, silk mills	3.6	4.2	4.0						
Weaving & finishing mills, wool	2.6	2.6	2.5						
Other textile mill products	20.9	21.0	20.4						
Apparel & other textile products—Total	41.2[1]/	41.6	42.4	$123.18	$117.97	32.5[3]/	33.9	$3.79[4]/	$3.48
Men's & boys' suits, coats, furn's. etc.	9.9	10.0	9.5						
Women's, misses' & children's outerwear	19.4	19.5	20.6						
Other apparel	11.9	12.1	12.3						
Paper & allied products	28.4	28.9	27.9	$197.62	$194.68	41.0	42.6	$4.82	$4.57
Printing & publishing	41.4	41.5	41.9	207.18	194.67	36.8	36.8	5.63	5.29
Chemicals & allied products	19.7	19.7	18.9	261.52	229.09	44.4	42.9	5.89[3]/	5.34
Rubber & miscellaneous plastics products	30.5	30.8	29.4	197.96	179.08	40.9	40.7	4.84	4.40
Leather & leather products—Total	21.1	21.5	20.9	127.79	129.20	35.4	36.6	3.61	3.53
Leather tanning & finishing	2.8	2.9	2.9						
Footwear (except rubber)	13.2	13.6	13.1						
Other leather & leather products	5.1	5.0	4.9						
Other nondurable goods	26.6	26.4	26.0	$166.06	$154.31	40.8	40.5	$4.07	$3.81
Nonmanufacturing—Total	1721.3	1720.2	1713.5						
Contract construction	69.6	71.8	78.7						
Transportation & public utilities	111.0[1]/	112.4	114.2						
Wholesale & retail trade	524.3	524.0	517.8						
Finance, insurance & real estate	131.3	131.7	133.7						
Service, miscellaneous & mining	518.8	517.6	501.3						
Government—Total	366.3	362.7	367.8						
Federal government	56.3	56.6	57.1						
State & local governments	310.0	306.1	310.7						

Note: Current month estimate always preliminary
[1]/Strike
[2]/Overtime
[3]/Shorter Workweek
[4]/Wage Increase

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